

3. Manufacturing overview

Capital Markets Day , 9 September 2009

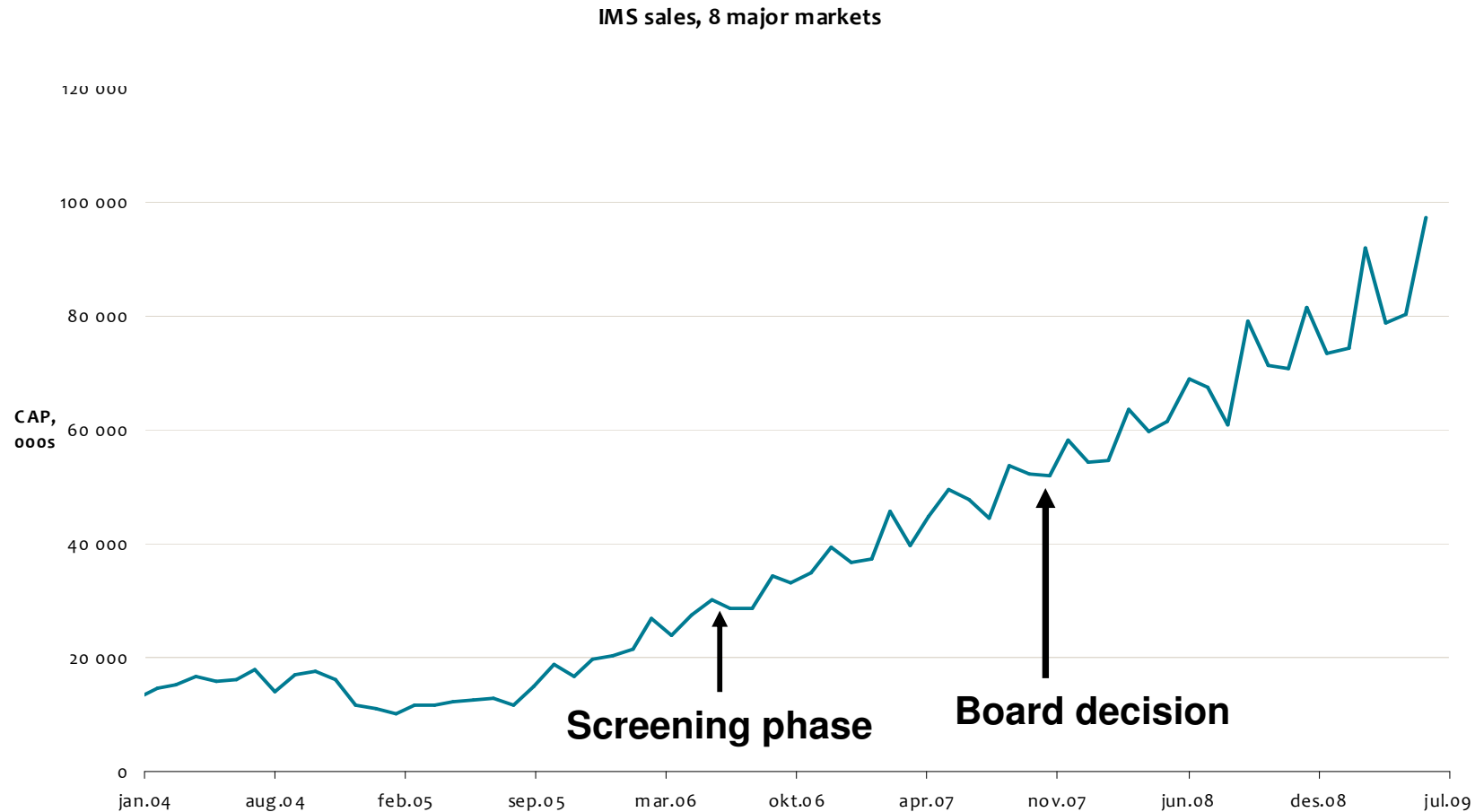
Kjetil Olsen, Senior Vice President Supply Chain



KalOmega film

- Open the link to watch the movie:
- http://www.filmsolutions.dk/NNE/Kalomega_20090903_500kM.wvx

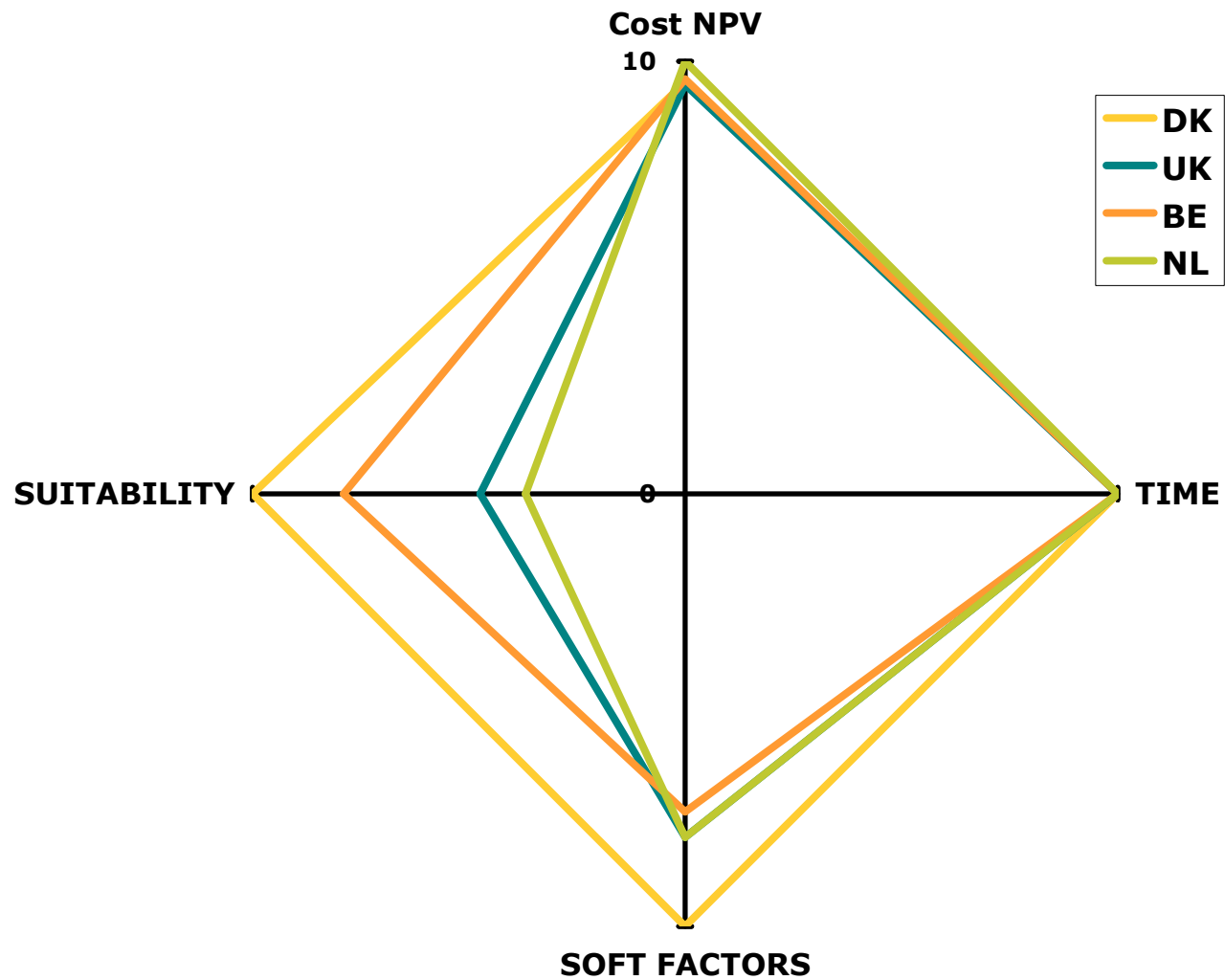
The KalOmega project: Building for the future



Strong volume growth → upfront capacity planning and investments

Source: IMS

Site selection & evaluation criteria



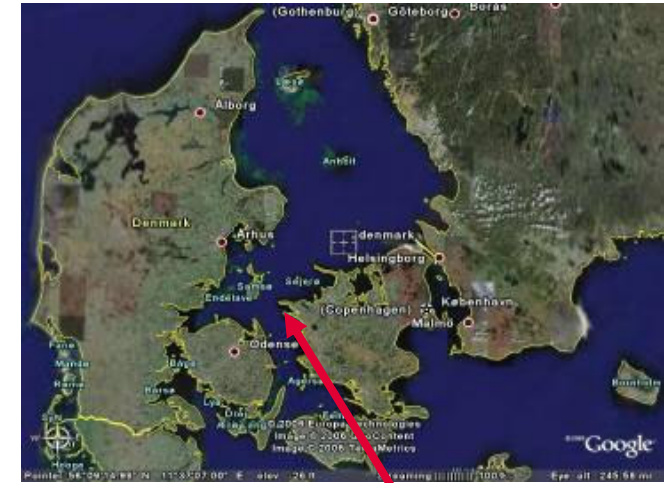
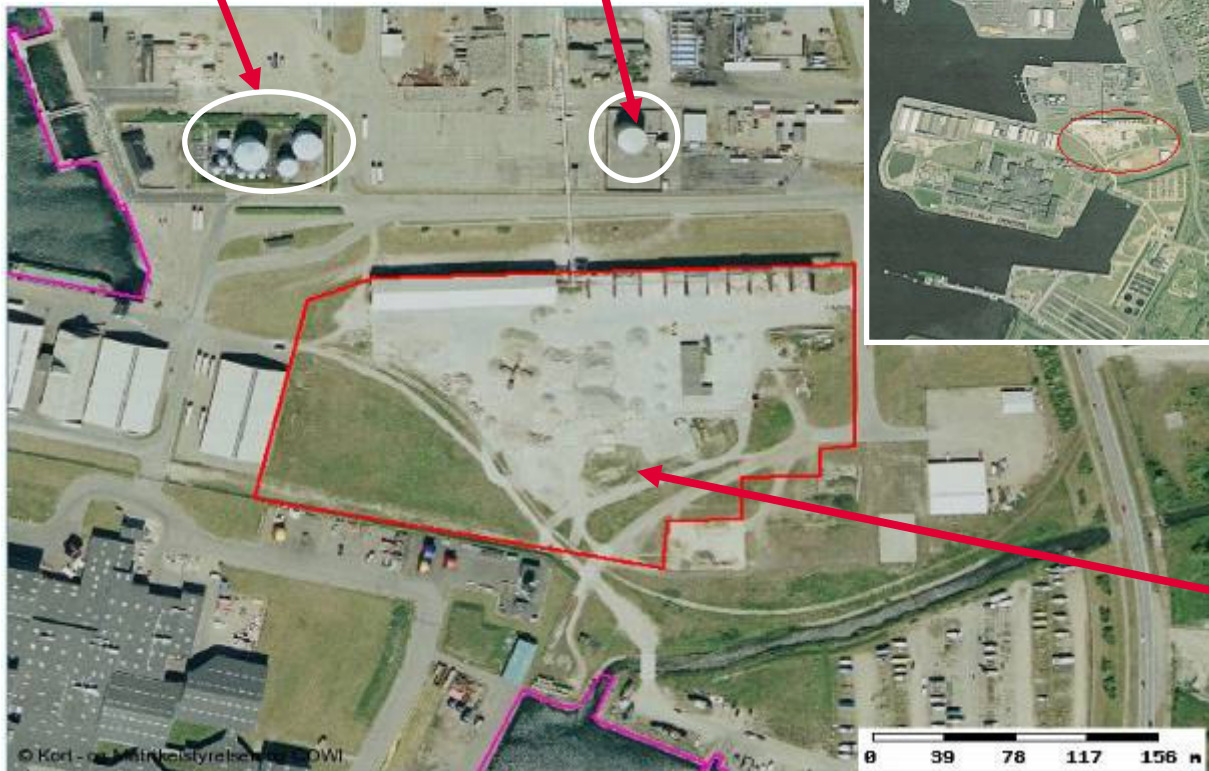
Site selection & evaluation criteria

- **Locations evaluated: Norway, UK, Belgium, Denmark**
- **Why not further expansion in Sandefjord?**
 - *Contingency purposes; reduce vulnerability*
- **Kalundborg evaluated as the best on site suitability and soft factors**
- **Kalundborg more expensive than Rotterdam, but ~equal to other sites**
- **Time equal for all sites**

Overview of the Kalundborg site

KTT Crude Fish Oil Tank Farm

NaOH Tank



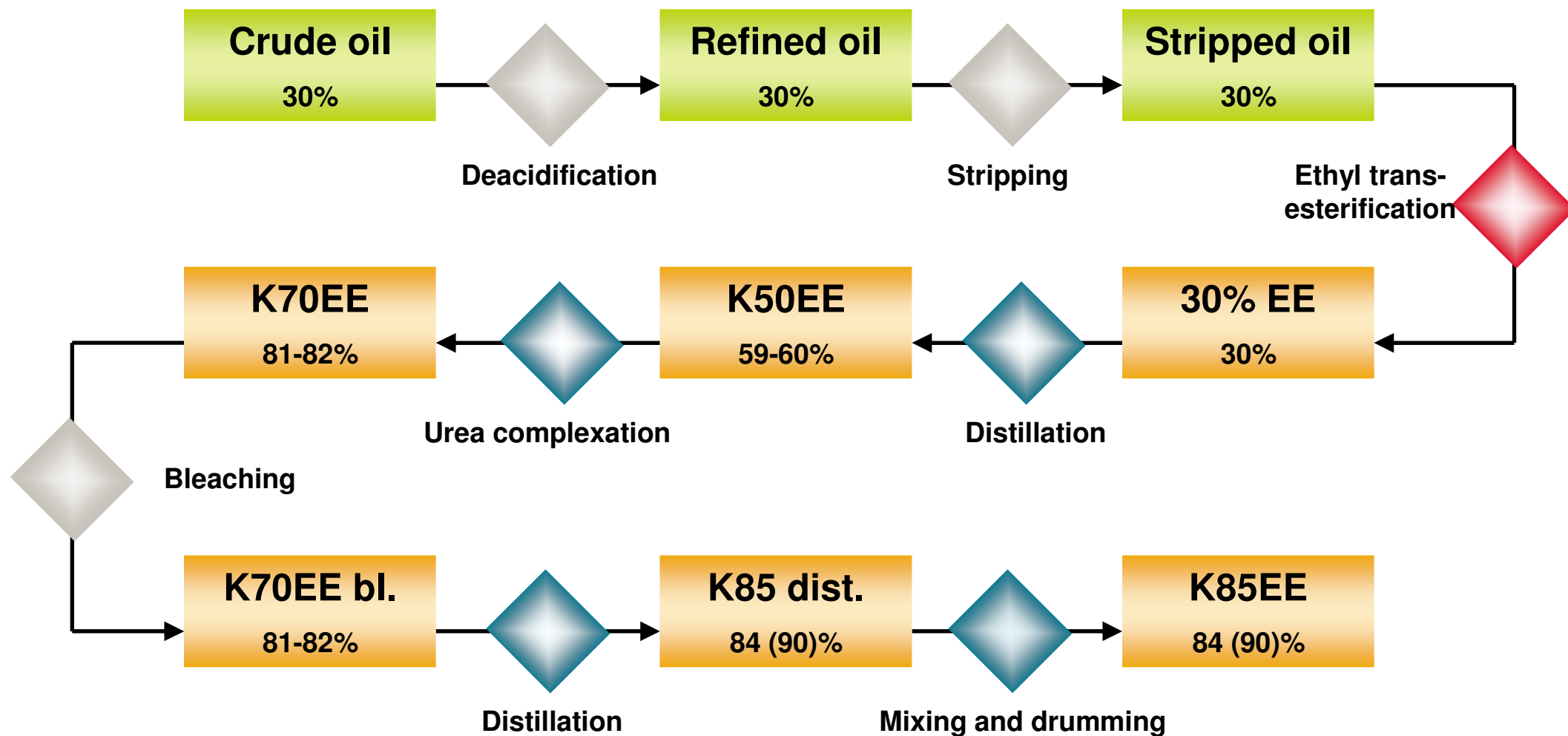
Kalundborg

The "KalOmega" site

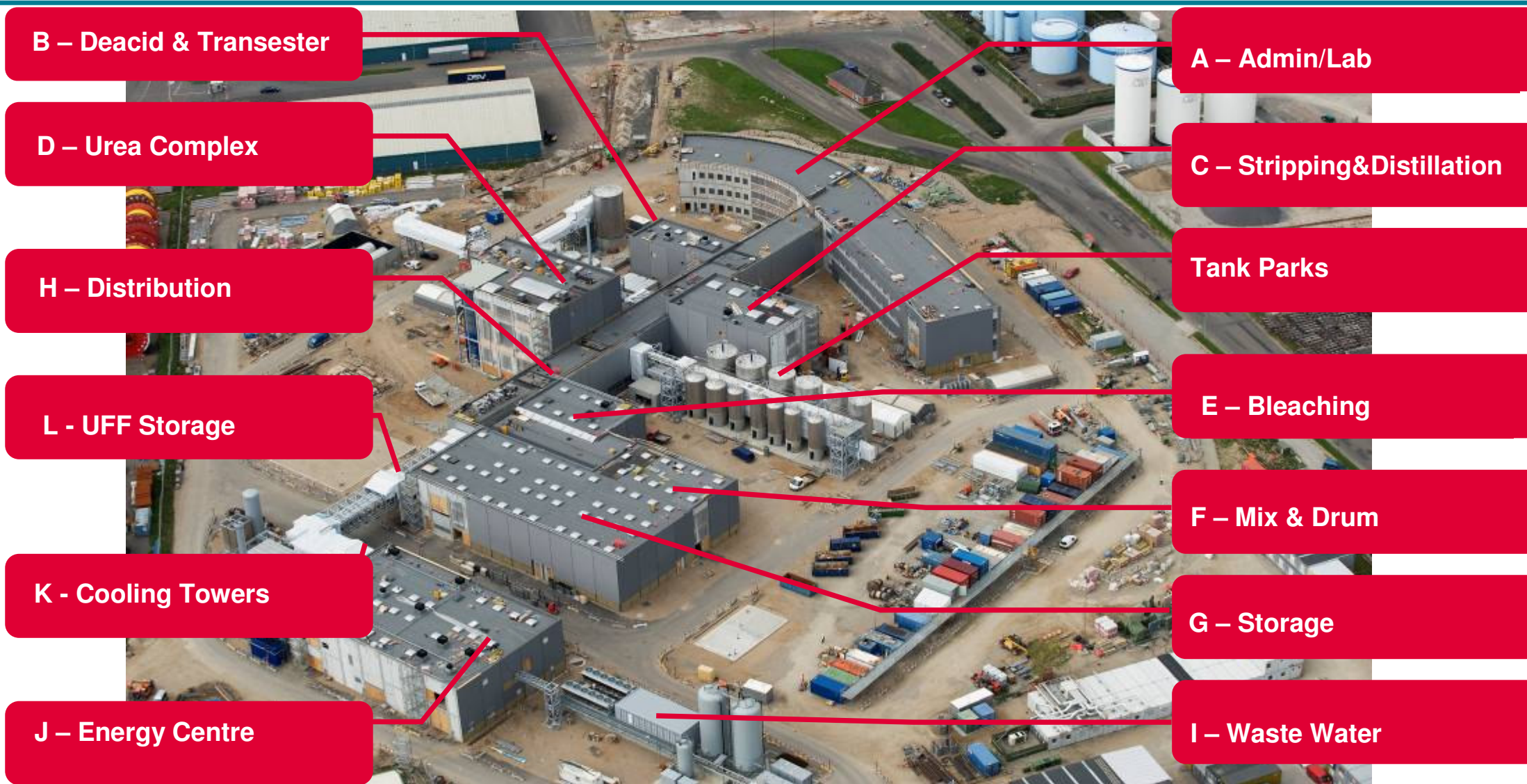
Overview of the Kalundborg site



Production of API



Plant layout



Important milestone:

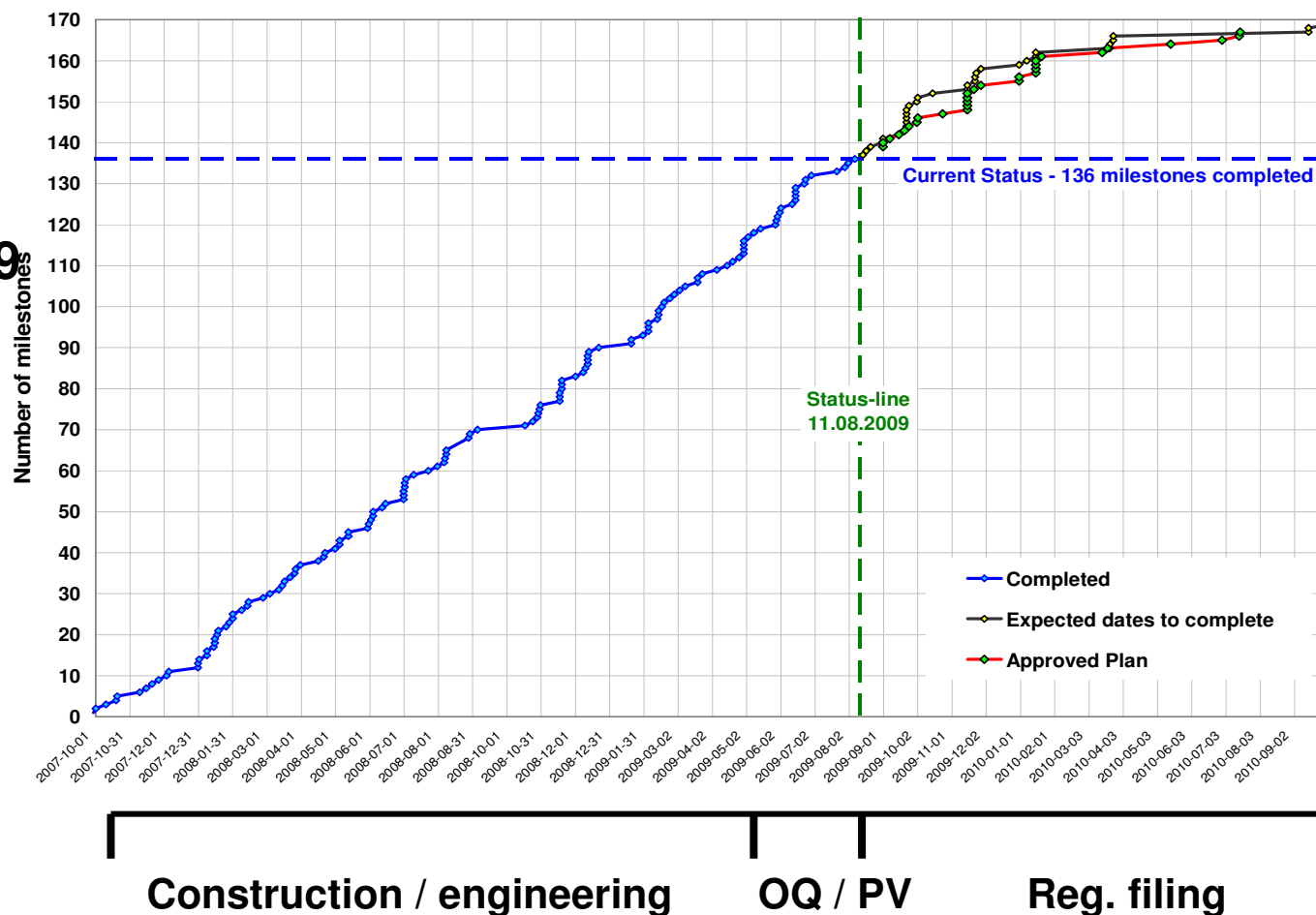
Process validation successfully completed

Three consecutive Process Validation (PV) batches successfully produced end of July 2009

Nr	Process module	PV1	PV2	PV3
4	Distillation	DONE	DONE	DONE
2	Stripping	DONE	DONE	DONE
3	Transesterification	DONE	DONE	DONE
5	UPP	DONE	DONE	DONE
5	UPP	DONE	DONE	DONE
1	Deacidification	DONE	DONE	DONE
6	Bleaching	DONE	DONE	DONE
7	Distillation	DONE	DONE	DONE
8	Mixing & drumming	DONE	DONE	DONE

Project completed and production started

- **Qualified Person (QP) statement issued**
 - *Production started*
- **GMP certification Q3 2009**
 - *Inspection report from Danish authorities*
- **Regulatory filing in Q4 2009**
 - *EU*
 - *US*
- **First commercial shipment Q1 2010**



Overview on two sunny days in March

March 2008



March 2009

